Data

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Suspended Particulate Matter Longitudinal Survey – Currituck Sound, NC; Oct 13-15, 2015, Cruise: CS151013-15, CHSD Stations: S5566-5587

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Title:

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Location (place name):

Currituck Sound, North Carolina

Location (bounding box coordinates):
36^0 33 52' N, 076^0 03 43'W; 36^0 33 38' N, 075^0 52 52'W; 36^0 03 45' N, 075^0 49 30'W; 36^0 04 31' N, 075^0 42 09'W

Start Date:

2015 October 13

Abstract:

Dataset consists of water column and bottom burst data, PICS, and light attenuation data collected as part of a 21 station longitudinal survey of the Currituck Sound, NC along a ~60 km transect northward from the Wright Memorial Bridge.

Description of Data:

At each station a 2-5 minute time series was collected with the profiler resting either on the seafloor, at a mid-water depth, or both, with a suite of instrumentation including: a YSI 6600 CTD, a Sequia LISST 100X, a Nortek Vector ADV and a Sontek ADVOcean. A PICS floc camera system was used to collect three to four 30-sec video sequences of settling particles in water that was collected at the beginning of each burst in its sample column. Total Suspended Solids (and fixed solids) were sampled from depth to calibrate the acoustic backscatter. CDOM water samples were also collected at each burst sample depth. At each station, light attenuation profiles were collected with a LI-COR light sensor and a TRIOS radiometer. Also at each station, temperature and salinity profiles were collected with a YSI Cataway CTD. The "logbook" is the hand written field notes and instrument setup documents. The "Profiler Set up" is a log of the location and serial number of the instruments mounted on the profiler. The "Consecutive Station Log" is an excel spreadsheet of the metadata associated with each station in the survey. Excel spreadsheet "Averaged Data" contains burst averaged data and statistics from the water column and bottom bursts. Raw and processed data from each instrument are zipped in a folder, or series of folders, identified by the type and serial number of the

instrument. All times are in Eastern Standard Time (EST). For ease of transfer the data is broken up by day of collection.

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Publication Type:

Data

Related Material:

Subject Keywords:

Sediment transport; acoustic backscatter; conductivity temperature and depth sensor; CTD; Acoustic Doppler Current Profiler; ADCP; LISST; Laser in situ scattering transmissometer; settling velocity; suspended size distribution; TSS; Total Suspended Solids; light attenuation; water clarity; CDOM; turbidity; PICS; Particle Imaging Camera System